

1147-54-191

Jennifer McLoud-Mann* (jmcloud@uw.edu), **Tamara Gomez**, **Patty Commins** and **John Bush**. *Hexagonal Mosaic Links Generated by Saturation*. Preliminary report.

Square mosaic knots have many applications in algebra, such as modeling quantum states. In this paper, we extend mosaic knot theory to a theory of hexagonal mosaic links, which are links embedded in a plane tiling of regular hexagons. We investigate hexagonal mosaic links created from particular patches of hextiles with a high number of link crossings, which we describe as almost saturated diagrams. Considering patches of varying size and shape, we identify the number of components that are produced in these almost saturated diagrams, with a particular focus on patches circumscribed by regular and irregular hexagons. Finally, we discuss open questions relating to almost saturated diagrams. (Received January 08, 2019)